



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

August 1, 2013

Ms. Pamela Morrill  
CDM Smith  
14432 SE Eastgate Way, Suite 100  
Bellevue, WA 98007

**Re: Opinion on RI/Focused FS pursuant to WAC 173-340-515(5) for a Portion of the Following Property Associated with a Site:**

- **Property Address:** 1419 Avenue D, Snohomish, WA
- **Facility/Site No.:** 12775192
- **VCP Project No.:** NW2740
- **CSID No.:** 4313

Dear Ms. Morrill:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Snohomish County Shop Upper Terrace (SCSUT) which is a portion of the approximately 7.4-acre former Snohomish County Shops (the Property). The Property is associated with the Skotdal Enterprises Site (the Site). The Property is currently enrolled in the Voluntary Cleanup Program (VCP). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release at the Site:

- Tetrachloroethene (PCE) in Ground Water

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on

Ms. Pamela Morrill  
August 1, 2013  
Page 2

Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial actions:

1. April 30, 2013, *Remedial Investigation and Focused Feasibility Study, Snohomish County Shop Upper Terrace, 1200 Block of Avenue D, Snohomish, Washington*, CDM Smith.

The report listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or sending an email to [nwro\\_public\\_request@ecy.wa.gov](mailto:nwro_public_request@ecy.wa.gov).

The Site is defined by the nature and extent of contamination associated with the following release:

- Tetrachloroethene (PCE) in Ground Water

The Site and its relationship to the SCSUT and Property are more particularly described in **Enclosure A** to this letter, which includes detailed Site diagrams. The description of the Site is based solely on the information contained in the document listed above.

Remedial investigation activities conducted for the Site include those conducted on the Property. The Site consists of groundwater contaminated with PCE at concentrations that exceed MTCA Method A cleanup levels and is presumed to be associated with a former dry cleaning operation that was located on the neighboring Skotdal property. **Enclosure A** includes a detailed description and diagrams of the Site, as currently known to Ecology. **Enclosure B** includes a legal description of the Property.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site, Ecology has determined:**

- Under the VCP, Ecology provides formal opinions on either Site cleanups or Property cleanups. Ecology understands that you are requesting an opinion on a proposed Property cleanup. However, the SCSUT is an arbitrary portion of the Property according to the Snohomish County assessor's records for parcel number 28051200405400. The real Property consists of both the upper and lower terraces. In order for Ecology to provide an "action" opinion on the proposed cleanup of the SCSUT portion of the Property, the

larger parcel would need to be legally subdivided accordingly.

- Characterization of the Site is not sufficient to establish cleanup standards for the Site or the Property. As indicated in the attached Site Diagram, the southwestern/leading edge of the PCE groundwater plume located on the SCSUT portion of the property has not been clearly delineated. Although PCE was not detected above MTCA cleanup levels in surface water samples collected from the drainage swale at the toe of the approximately 30 foot slope that separates the upper and lower terraces (and probably upper and lower shallow perched groundwater), it is not clear whether this is due to dilution with surface water or evaporation of the contaminated groundwater “daylighting” out the surface of the slope. A description of both lateral and vertical groundwater movement is needed, including an evaluation of contaminant transport.
- In the Focused FS, you propose meeting MTCA requirements by implementing institutional controls to restrict groundwater withdrawal, protect human health and the environment for future construction-related activities, and address potential vapor mitigation in future buildings. However, cleanup actions that use engineered controls and/or institutional controls shall meet each of the minimum requirements specified in WAC 173-340-360, just as any other cleanup. In addition, to meet MTCA requirements, cleanup actions shall not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the Site.
- Only a portion of the PCE-contaminated groundwater on the Site occurs beneath the Property. Ecology understands that the likely source of the PCE-contaminated groundwater is a former dry cleaning facility (Snohomish Square Laundry and Cleaners) which was located approximately 620 feet to the north, hydraulically up-gradient and beyond the boundaries of the SCSUT portion of the Property. Efforts to negotiate a collaborative and holistic approach to Site cleanup with those responsible for the Site should be exhausted prior to proposing to address cleanup for only a portion of the Site.
- Identified contaminants of concern include volatile organic compounds (VOCs), specifically PCE. The conceptual site model should include analysis of the air exposure pathway. Portions of the Property are covered with asphalt surfaces that could potentially “trap” vapor phase VOCs.
- Additional data is needed to describe the nature and extent of soil vapor contamination.
- On and off-Property historic and/or existing subsurface utilities and the potential for contaminant preferential pathways and migration need to be addressed in the RI.

Ms. Pamela Morrill  
August 1, 2013  
Page 4

- Any engineered or institutional controls considered as part of the Site or Property cleanup shall not exacerbate current Site conditions. This concern would be addressed in the FS.

**This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action.** To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. **This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.**

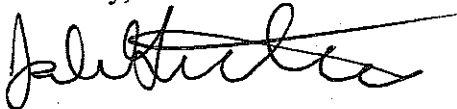
Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-7135 or [jgue461@ecy.wa.gov](mailto:jgue461@ecy.wa.gov).

Sincerely,



John Guenther, LHG  
Site Manager  
NWRO Toxics Cleanup Program

Enclosures (2) A – Description and Diagrams of the Site  
B – Legal Description of the Property

cc: Sonia Fernandez, VCP Coordinator, Ecology

Ms. Pamela Morrill  
August 1, 2013  
Page 5

## **Enclosure A**

### **Description and Diagrams of the Site**

# Site Description

## Site Definition

The Site is defined by the nature and extent of tetrachloroethene (PCE) detected in groundwater. A portion of the Site is located at 1419 Avenue D in Snohomish, WA (the Property). The Site, as currently understood, is indicated on the attached Site Diagrams.

## Area/Property Description

The Property is within a commercially-developed portion of the City of Snohomish (City). The Property is the location of the former Snohomish County Shops located between Avenue D and 97<sup>th</sup> Avenue SE. The Property lies across two geologically-formed terraces separated by an approximate 30 foot elevation difference. The upper terrace is on the east and the lower terrace is on the west. The SCSUT comprises approximately 4.5 acres of the Property, is relatively flat and is at an elevation of approximately 145 feet above mean sea level (MSL).

## Property History and Current Use

Nearly all of the structures on the SCSUT were demolished in 2009. The northern portion of the SCSUT was used for storage of miscellaneous parts and equipment and for stockpiling sand and gravel for road maintenance. The central portion of the SCSUT included a vehicle wash facility and associated water collection sump. The southern portion of the SCSUT included the Sherriff's special operations building, traffic operations building, carpentry shop, fleet management offices, the M&O office and sign shop. The SCSUT is currently vacant. Most all of the concrete footings and slabs have also been removed with patches of asphalt, bare ground and weeds remaining in areas.

## Contaminant Source and History

The Site release is presumed to be from the former Snohomish Square Laundry and Cleaners (Skotdal Enterprises, Facility ID.: 127755192) located approximately 620 feet north of the SCSUT at 1419 Avenue D. The Site was first reported to Ecology in July 2004 and placed on Ecology's Confirmed & Suspected Contaminated Sites List in August 2004. PCE use by Snohomish Square Laundry and Cleaners was acknowledged in 2003 and 2004. The period of PCE use was not determined but PCE use by Snohomish Square Laundry and Cleaners may have occurred as early as the 1970s.

## Physiographic Setting

The Site is located within the Puget Sound Lowland Physiographic Province, a north-south trending structural and topographic depression is bordered on its west side by the Olympic Mountains, and to the east by the Cascade Mountain foothills. The Puget Lowland is underlain by Tertiary volcanic and sedimentary bedrock, and has been filled to the present day land surface with Pleistocene glacial and non-glacial sediments. Repeated advances and retreats of the continental glaciers that flowed through the area out of Canada more than 10,000 years ago created the low undulating plains that are characteristic of the Puget Sound Lowland. Current land surfaces reflect the most recent changes that are directly related to glacial events occurring between 13,000 and 20,000 years ago. The Site is located in the Snohomish River valley. The Snohomish River valley in this area is a relatively flat northwest-southeast aligned valley

approximately three miles wide and surrounded by relatively low-laying hills. The Property sits near the center of the valley between these low-laying hills at an elevation of approximately 145 feet above mean sea level.

### **Ecological Setting**

The Site is located within a commercially-developed portion of the City. The ecological setting is typical of commercial development – mostly impervious surfaces, retail and commercial structures with some residential mixed-use, relatively small landscape features and scattered patches of natural vegetation. Although there are some relatively large tracts of undeveloped and vegetated land to the west, no significant terrestrial habitat is known or has been observed in the immediate vicinity or within 500 feet of the Site.

### **Geology**

The low-laying hills surrounding the Snohomish River valley typically consist of scattered areas of Vashon glacial till underlain by Vashon advance outwash and pre-Vashon transitional beds. The primary geologic unit for the Property area is the Vashon glacial till. Vashon glacial till typically consists of very dense deposits of silty sand to sandy silt with varying amounts of gravels. The relatively dense glacial till is often referred to as hardpan, whose soil characteristics limit infiltration and the movement of groundwater through it. This limited groundwater is often encountered within the upper portion of the till as perched groundwater. At the SCSUT, native soils consist of brown silty sand with gravel that appear to be primarily that of recessional outwash with some irregularities that may indicate the presence of till and advance outwash deposits at various depths. Although reference is made to a groundwater monitoring well screened to a depth of 70 feet below the ground surface (bgs) (AGI, 1992), the maximum depth explored during recent remedial investigation activities was approximately 26 feet bgs at GW-10.

### **Groundwater**

Groundwater occurs throughout the region under varying conditions including perched, unconfined and confined. At the SCSUT, laterally discontinuous perched groundwater occurs within the recessional outwash at depths ranging between two and five feet bgs. An unconfined aquifer has also been encountered in the glacial till at elevations ranging from 40 to 80 feet MSL (AGI, 1992; CDM 2008), which is approximately 40 feet below the first zone of perched groundwater on the upper terrace. The groundwater flow direction is generally southerly.

### **Storm Water/Surface Water**

Stormwater and surface water features on and near the Property include two storm drain systems, drainage swales, roadside culverts and ditches, and Cemetery Creek. Blackman Lake is located approximately 2,000 feet northeast and the Snohomish River is located approximately 4,000 feet to the southwest of the Property. There are two storm drain systems on the SCSUT. The first system includes water discharged from the northern portion of the SCSUT and a seasonal drainage swale along the northern SCSUT boundary that drains the adjacent northern properties. This combined stormwater discharges to a seasonal drainage swale that extends along the toe of the slope that separates the upper and lower terraces of the Property. The drainage swale enters a

strom drain system near the northeast corner of the lower terrace that flows northward about 200 feet and discharges to a drainage ditch that eventually discharges to Cemetery Creek. The second system collects water on the southern portion of the SCSUT that flows into the storm drain system at the southwest corner of the lower terrace, and then discharges from a culvert located on the opposite side of Bonneville Avenue.

### **Water Use/Water Supply**

The City has two sources for providing drinking water: the Pilchuck River and water purchased from the City of Everett. The City surface water treatment plant is located about 16 miles northeast of the city, near Granite Falls on the Pilchuck River. The plant (built in 1981) treats an average of 275,000 gallons of water daily that is drawn from the Pilchuck River at the weir dam (built in 1936) and sends it through 16 miles of transmission main to reservoirs with the capacity to hold over 6 million gallons of water. The Property is supplied with water purchased from the City of Everett. This water is delivered directly to customers and is stored in a 2.7-million-gallon reservoir located off of Terrace Avenue. City of Everett water is supplied from Spada Reservoir, which was created in 1965. The reservoir holds about 50 billion gallons of water and is located about 30 miles east of Everett in the Sultan Basin Watershed. From Spada Lake, the water flows through about 7 miles of tunnels and pipelines to Chaplain Reservoir where the City of Everett water treatment facility is located. Chaplain Reservoir holds about 4.5 billion gallons of water.

### **Release and Extent of Contamination – Groundwater**

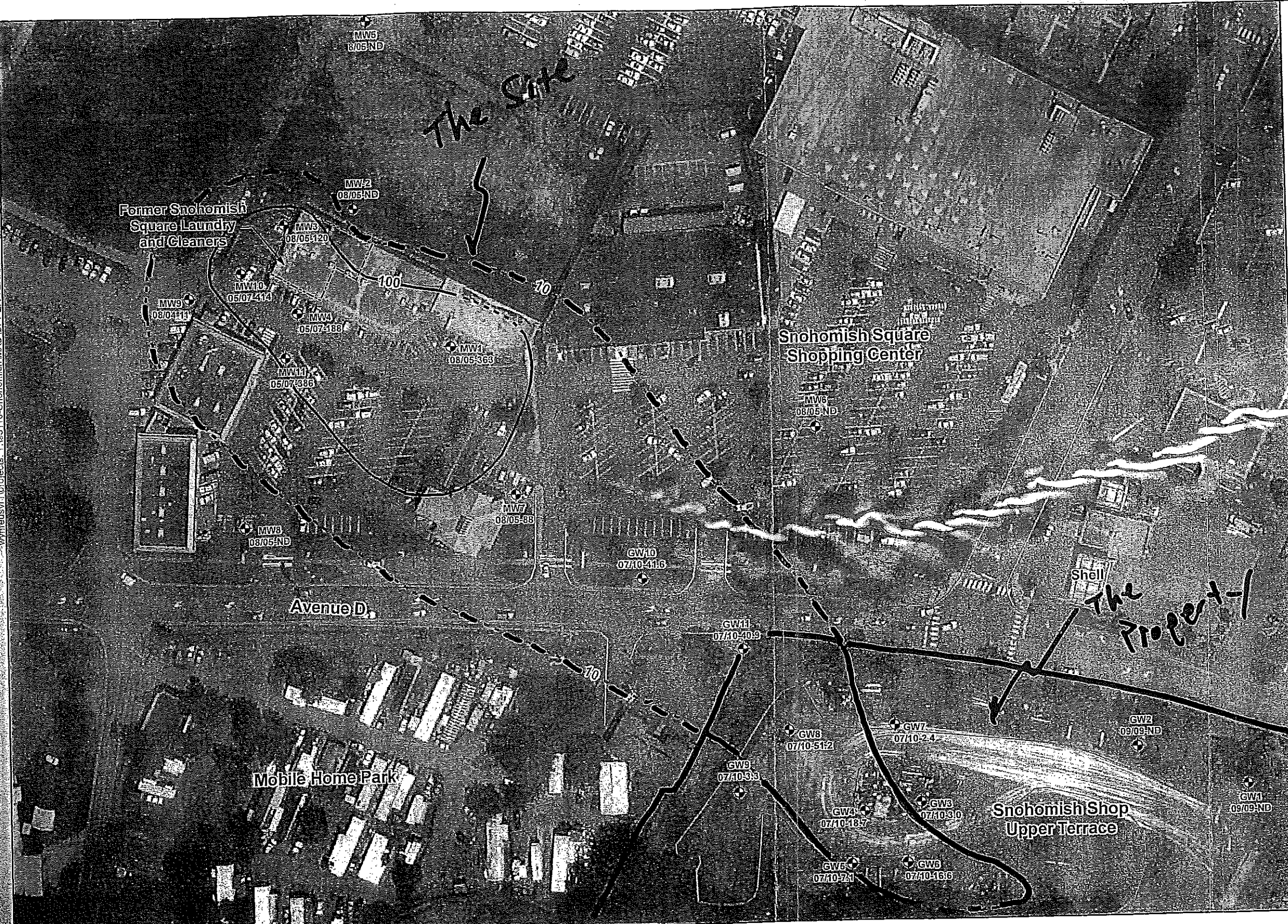
The PCE plume originates in the vicinity of the former Snohomish Square Laundry and Cleaners and extends into the Property and across the SCSUT. PCE concentrations ranged from 0.4 µg/L to 50 µg/L in groundwater samples collected from monitoring wells GW-9 and GW-8, respectively. The highest PCE concentrations appear to occur in the northern, upgradient portion of the SCSUT.



# Site Diagrams

10/10/10

\\nredsvr1\projects\1163110-Snohomish\MXD\UPPER TERRACE\Figures\UPPER Total cVOC Plume - v20130305.mxd



**Legend**

- Property Boundary
- Monitoring Well Location and ID with Total cVOC Concentration in µg/L on Date Indicated
- Total cVOC Isoconcentration Contour in µg/L Dashed Where Inferred
- Total cVOC Isoconcentration Contour in µg/L Dashed Where Inferred

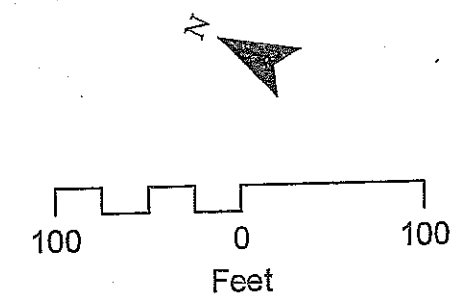
cVOC - Chlorinated Volatile Organic Compounds - Tetrachloroethene and its degradation products

µg/L - micrograms per liter

Reference - ERM, 2007. Source Area Removal and Remedial Action Pilot Study. Source of data and contours for all "MW" wells.

ND = Not detected

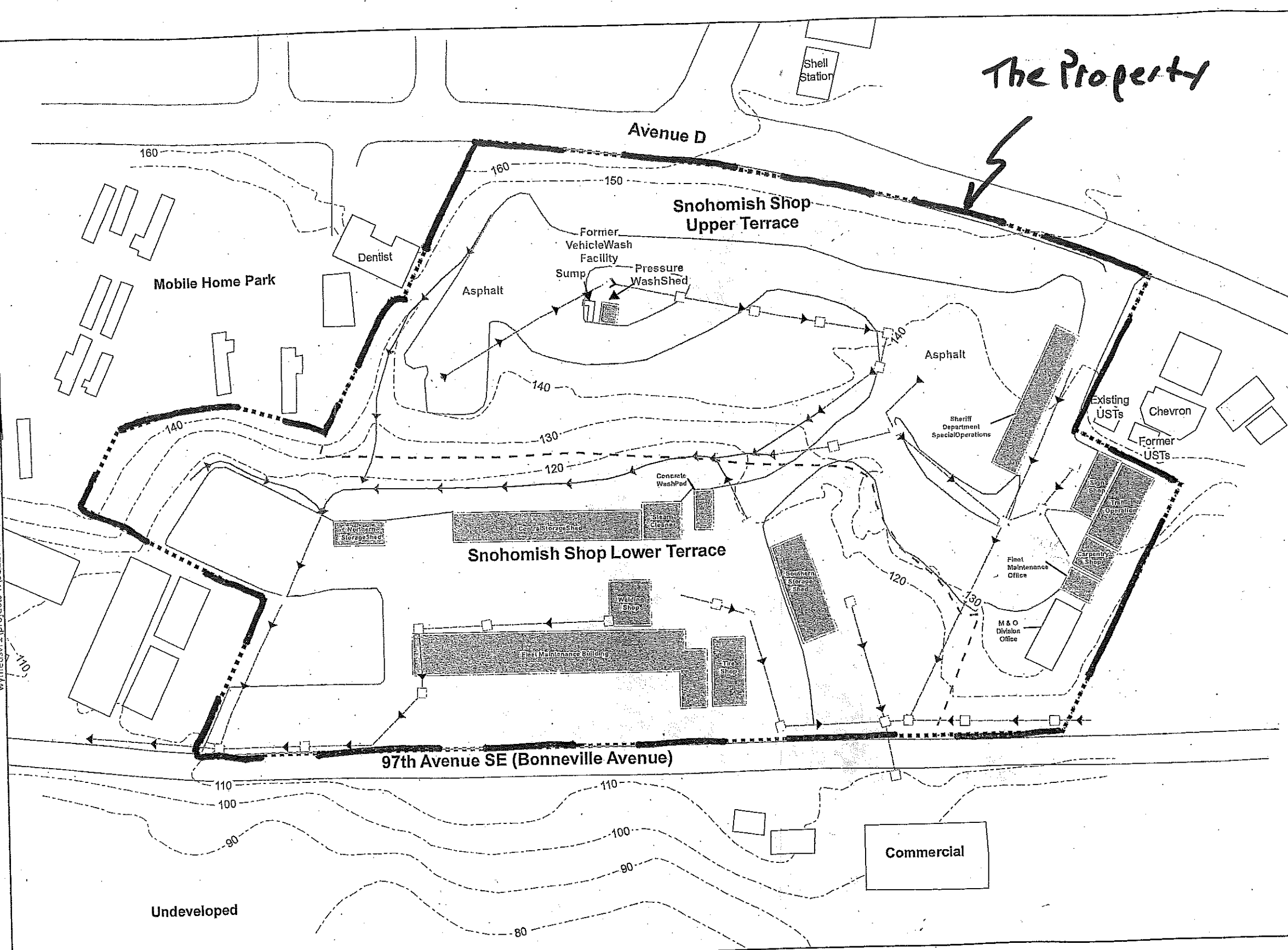
Source: Google Earth Pro™ (June 21, 2010)



Snohomish County Shop Upper Terrace  
Snohomish, Washington

Ecology 2 -Figure 9-  
On- and Off-Property Total cVOCs in  
Groundwater >5 µg/L

wymfedsvr1\projects\193110-Snohomish\MXD\UPPER TERRACE\Figure2\_UPPER Former Snohomish Shop and Site vicinity\_v20130304.mxd

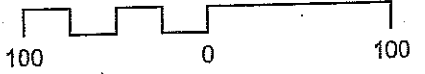


The Property

- Legend**
- Snohomish Shop
  - Property Boundary
  - Snohomish Shop Upper Terrace Boundary (Property)
  - Existing Structure
  - Former Structure
  - Lines of Equal Ground Surface Elevation
  - Edge of Asphalt
  - Storm Drain (Showing flow Direction)
  - Swale
  - Catch Basin

Reference: AGI, 1992 Final Report. Focused Remedial Investigation / Feasibility Study of Volatile Organic Compounds, Snohomish Shop, Snohomish, Washington. Modified for current conditions.

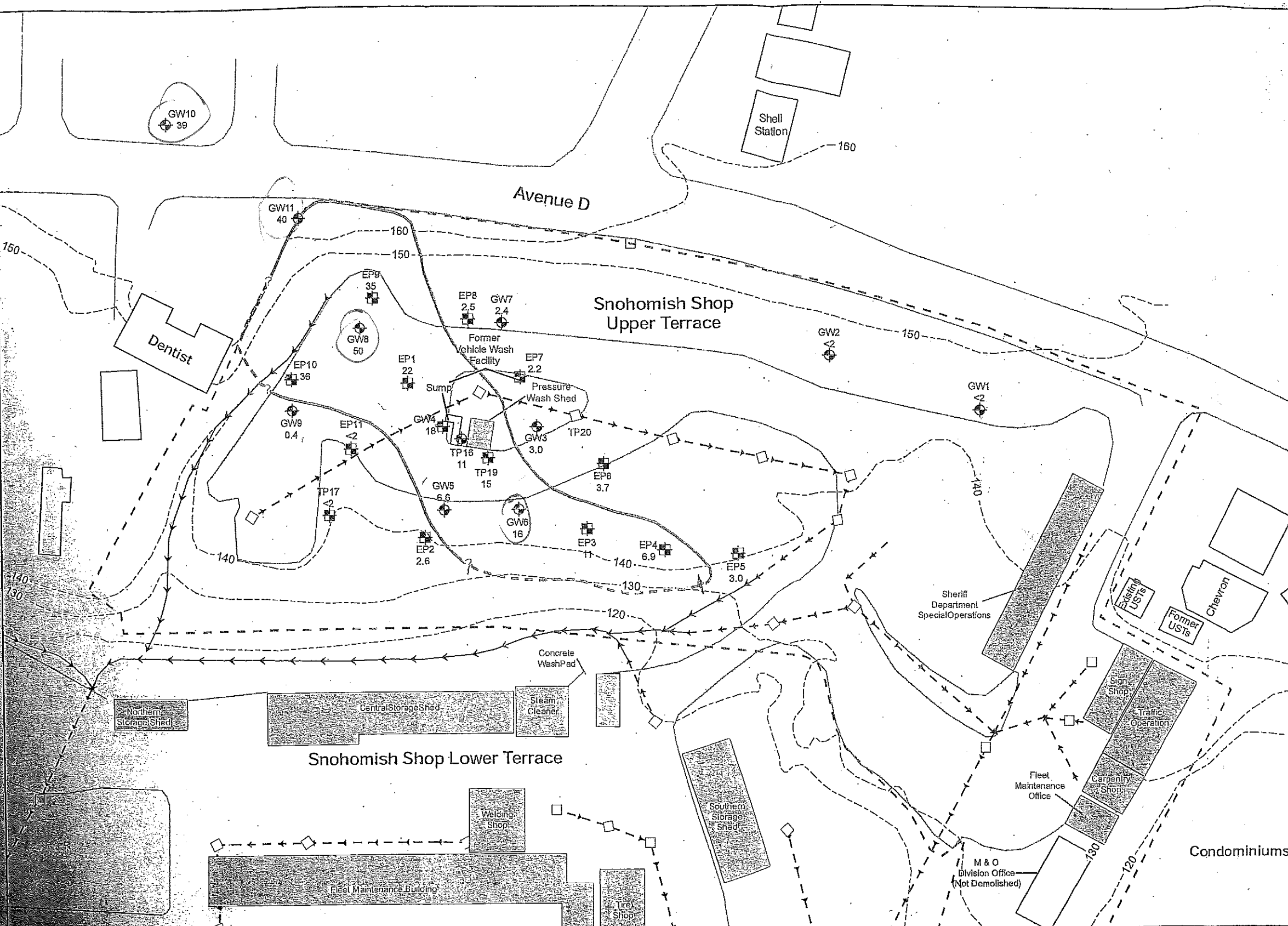
Note: Elevations are in feet above mean sea level. (MSL)



Snohomish County Shop Upper Terrace  
Snohomish, Washington

Ecology 1 **Figure 2**  
Former Snohomish Shop and Vicinity

\\hdsrv1\projects\14991\c\Snohomish\MD\UPPER TERRACE\Figures\UPPER OnsitePCEPlumeLimits\_V20130305.mxd



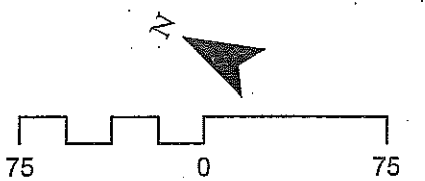
- ### Legend
- Property Boundary
  - Existing Structure
  - Former Structure
  - PCE Isoconcentration Contour in µg/L (Dashed where inferred)
  - 130 Lines of Equal Ground Surface Elevation
  - Edge of Asphalt
  - Storm Drain (Showing Flow Direction)
  - Swale
  - Catch Basin
  - TP18 2.6 Test Pit Location and ID with PCE Concentration in µg/L\*
  - GW5 6.6 Monitoring Well Location and ID with PCE Concentration in µg/L\*

PCE - Tetrachloroethene  
 µg/L - micrograms per liter  
 < - not detected at the reported concentration

\* Dates sampled vary between 06/18/09 and 07/01/10. Where monitoring wells were sampled more than once, the sample data from 07/01/10 are used.

Reference: AGI, 1992  
 Final Report. Focused Remedial Investigation / Feasibility Study of Volatile Organic Compounds, Snohomish Shop, Snohomish, Washington. Modified for current conditions.

Test Pit locations surveyed by CDM using GPS  
 Monitoring well locations surveyed by Snohomish County



Snohomish County Shop Upper Terrace  
 Snohomish, Washington

Ecology 3 Figure 8  
 On-Property Groundwater PCE Plume Limits

**Enclosure B**  
**Legal Description of the Property**

## Property Account Summary

Parcel Number	28051200405400	Property Address	1201 BONNEVILLE AVE , SNOHOMISH, WA 98290-2003
---------------	----------------	------------------	--

### Parties - For changes use 'Other Property Data' menu

Role	Percent	Name	Mailing Address
Taxpayer	100	SNOHOMISH CO PROP MGMT	3000 ROCKEFELLER AVE M/S 404, EVERETT, WA 98201
Owner	100	SNOHOMISH CO PROP MGMT	3000 ROCKEFELLER AVE M/S 404, EVERETT, WA 98201
Mortgage Company	100	PUBLIC WORKS SITES	3000 ROCKEFELLER AVE, M/S 404, EVERETT, WA 98201

### General Information

Property Description	SEC 12 TWP 28 RGE 05BEG AT NE COR SE1/4 TH S TAP 98FT S OF NE COR SE1/4 NE1/4 SE1/4 TH W TO E LN CO RD TH NWLY ALG SD RD TO INT N LN NE1/4 SE1/4 TH E ALG SD N LN TO NE COR SE1/4 TPB
Property Category	Land and Improvements
Status	Active, Locally Assessed
Tax Code Area	00735

### Property Characteristics

Use Code	492 Transportation Services & Arrangements
Unit of Measure	Acre(s)
Size (gross)	7.4

### Related Properties

No Values Found

### Active Exemptions

Government Property

No Available Tax Charges Information for this Property at the Moment.

### Distribution of Current Taxes

District	Rate	Amount
TOTALS		

### Property Values

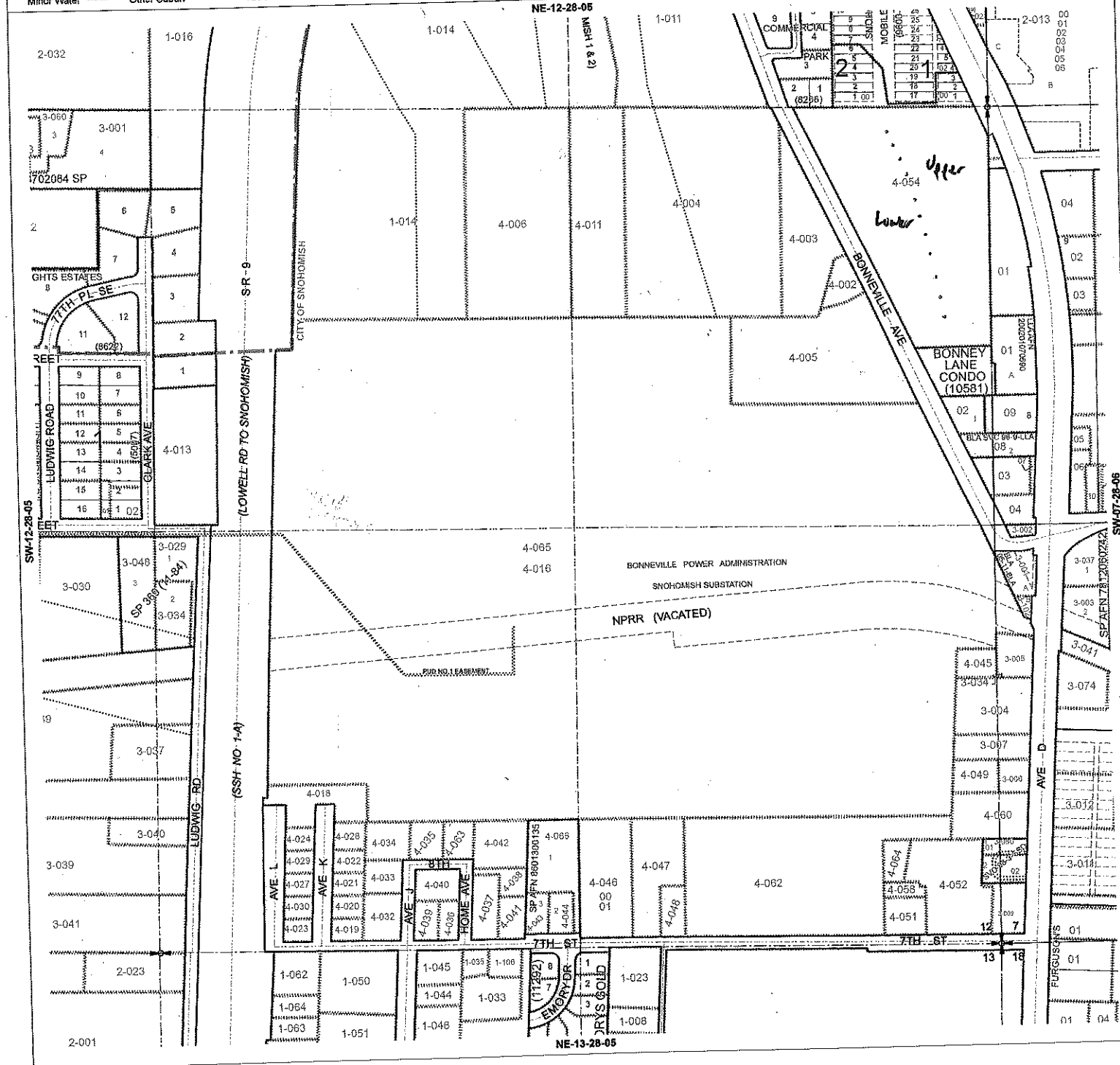
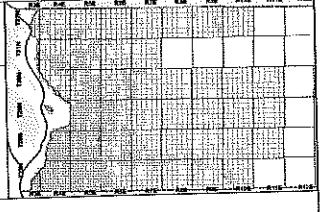
Value Type	Tax Year 2013	Tax Year 2012	Tax Year 2011	Tax Year 2010	Tax Year 2009
Taxable Value Regular	0	0	0	0	0
Exemption Amount Regular	1,537,500	1,565,300	1,630,700	1,635,700	2,869,700
Market Total	1,537,500	1,565,300	1,630,700	1,635,700	2,869,700
Assessed Value	1,537,500	1,565,300	1,630,700	1,635,700	2,869,700

QUARTER <b>SE</b>	SECTION <b>12</b>	TOWNSHIP N.W.B.L. <b>28</b>	RANGE E.W.M. <b>5</b>
Centerline	Lot	Block	Section
Gov Lot	Subdiv	ROW	Quarter
Major Water	Other Lot	Vac ROW	16th
Minor Water	Other Subdiv	Vac Lot	

Map produced on April 25, 2013

1 inch = 200 feet

A product of the Assessor's Office  
Snohomish County, Washington





Printable Version

[Home](#) [Other Property Data](#) [Help](#)

[Property Search](#) > [Search Results](#) > [Property Summary](#)

**Property Account Summary**

Parcel Number	28051200405400	Property Address	1201 BONNEVILLE AVE , SNOHOMISH, WA 98290-2003
---------------	----------------	------------------	--

**Parties - For changes use 'Other Property Data' menu**

Role	Percent	Name	Mailing Address
Taxpayer	100	SNOHOMISH CO PROP MGMT	3000 ROCKEFELLER AVE M/S 404, EVERETT, WA 98201
Owner	100	SNOHOMISH CO PROP MGMT	3000 ROCKEFELLER AVE M/S 404, EVERETT, WA 98201
Mortgage Company	100	PUBLIC WORKS SITES	3000 ROCKEFELLER AVE, M/S 404, EVERETT, WA 98201

**General Information**

Property Description	SEC 12 TWP 28 RGE 05BEG AT NE COR SE1/4 TH S TAP 98FT S OF NE COR SE1/4 NE1/4 SE1/4 TH W TO E LN CO RD TH NWLY ALG SD RD TO INT N LN NE1/4 SE1/4 TH E ALG SD N LN TO NE COR SE1/4 TPB
Property Category	Land and Improvements
Status	Active, Locally Assessed
Tax Code Area	00735

*≈ 9.5 total ?*

**Property Characteristics**

Use Code	492 Transportation Services & Arrangements
Unit of Measure	Acre(s)
Size (gross)	7.4

**Related Properties**

No Values Found

**Active Exemptions**

Government Property

No Available Tax Charges Information for this Property at the Moment.

**Distribution of Current Taxes**

District	Rate	Amount
TOTALS		

**Pending Property Values**

Pending Tax Year	Market Land Value	Market Improvement Value	Market Total Value	Current Use Land Value	Current Use Improvement	Current Use Total Value
2014	1,302,400	52,100	1,354,500	0	0	0

**Property Values**

Value Type	Tax Year 2013	Tax Year 2012	Tax Year 2011	Tax Year 2010	Tax Year 2009
Taxable Value Regular	0	0	0	0	0
Exemption Amount Regular	1,537,500	1,565,300	1,630,700	1,635,700	2,869,700
Market Total	1,537,500	1,565,300	1,630,700	1,635,700	2,869,700
Assessed Value	1,537,500	1,565,300	1,630,700	1,635,700	2,869,700
Market Land	1,485,400	1,528,900	1,594,300	1,594,300	1,594,300
Market Improvement	52,100	36,400	36,400	41,400	1,275,400
Personal Property					

**Levy Rate History**

Tax Year	Total Levy Rate
2012	13.791224
2011	11.595854
2010	10.467537

**Real Property Structures**

Description	Type	Year Built	More Information

**Property Sales (since 7/31/1999)**

Transfer Date	Receipt Date	Sales Price	Excise Number	Deed Type	Grantor (Seller)	Grantee (Buyer)	Other Parcels

**Property Maps**

Neighborhood Code	Township	Range	Section	Quarter	Parcel Map
5106000	28	05	12	SE	<a href="#">View parcel maps for this Township/Range/Section</a>

**Receipts**